

## SEQUENCE LISTING

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<120> NOVEL EPITHELIAL TISSUE IMAGING AGENT

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<160> 93

<170> PatentIn 3.0

<210> 1

<211> 137

<212> Protein

<213> Human

<220>

<221> misc-feature

<222> Synthetic polypeptide J chain

<400> 1

Gln Glu Asp Glu Arg Ile Val Leu Val Asp Asn Lys Cys Lys Cys Ala  
1 5 10 15

Arg Ile Thr Ser Arg Ile Ile Arg Ser Ser Glu Asp Pro Asn Glu Asp  
20 25 30

Ile Val Glu Arg Asn Ile Arg Ile Ile Val Pro Leu Asn Asn Arg Glu  
35 40 45

Asn Ile Ser Asp Pro Thr Ser Pro Leu Arg Thr Arg Pro Val Tyr His  
50 55 60

Leu Ser Asp Leu Cys Lys Lys Cys Asp Pro Thr Glu Val Glu Leu Asp  
65 70 75 80

Asn Gln Ile Val Thr Ala Thr Gln Ser Asn Ile Cys Asp Glu Asp Ser  
85 90 95

Ala Thr Glu Thr Cys Tyr Thr Tyr Asp Arg Asn Lys Cys Tyr Thr Ala  
 100 105 110

Val Val Pro Leu Val Tyr Gly Gly Glu Thr Lys Met Val Glu Thr Ala  
 115 120 125

Leu Thr Pro Asp Ala Cys Tyr Pro Asp  
 130 135

<210> 2  
 <211> 135  
 <212> Protein  
 <213> Mouse

<220>  
 <221> misc-feature  
 <222> Synthetic polypeptide J chain

<400> 2

Gln Asp Glu Asn Glu Arg Ile Val Val Asp Asn Lys Cys Lys Cys Ala  
 1 5 10 15

Arg Ile Thr Ser Arg Ile Ile Pro Ser Ala Glu Asp Pro Ser Gln Asp  
 20 25 30

Ile Val Glu Arg Asn Val Arg Ile Ile Val Pro Leu Asn Ser Arg Glu  
 35 40 45

Asn Ile Ser Asp Pro Thr Ser Pro Met Arg Thr Lys Pro Val Tyr His  
 50 55 60

Leu Ser Asp Leu Cys Lys Lys Cys Asp Thr Thr Glu Val Glu Leu Glu  
 65 70 75 80

Asp Gln Val Val Thr Ala Ser Gln Ser Asn Ile Cys Asp Ser Asp Ala  
 85 90 95

Glu Thr Cys Tyr Thr Tyr Asp Arg Asn Lys Cys Tyr Thr Asn Arg Val  
 100 105 110

Lys Leu Ser Tyr Arg Gly Gln Thr Lys Met Val Glu Thr Ala Leu Thr  
 115 120 125

Pro Asp Ser Cys Tyr Pro Asp  
 130 135

<210> 3  
 <211> 137  
 <212> Protein  
 <213> Rabbit

<220>  
 <221> misc-feature  
 <222> Synthetic polypeptide J chain

<400> 3

Asp	Asp	Glu	Ala	Thr	Ile	Leu	Ala	Asp	Asn	Lys	Cys	Met	Cys	Thr	Arg	1	5	10	15
Val	Thr	Ser	Arg	Ile	Ile	Pro	Ser	Thr	Glu	Asp	Pro	Asn	Glu	Asp	Ile	20	25	30	
Val	Glu	Arg	Asn	Ile	Arg	Ile	Val	Val	Pro	Leu	Asn	Asn	Arg	Glu	Asn	35	40	45	
Ile	Ser	Asp	Pro	Thr	Ser	Pro	Leu	Arg	Arg	Asn	Pro	Val	Tyr	His	Leu	50	55	60	
Ser	Asp	Val	Cys	Lys	Lys	Cys	Asp	Pro	Val	Glu	Val	Glu	Leu	Glu	Asp	65	70	75	80
Gln	Val	Val	Thr	Ala	Thr	Gln	Ser	Asn	Ile	Cys	Asn	Glu	Asp	Asp	Gly	85	90	95	
Val	Pro	Glu	Thr	Cys	Tyr	Met	Tyr	Asp	Arg	Asn	Lys	Cys	Tyr	Thr	Thr	100	105	110	
Met	Val	Pro	Leu	Arg	Tyr	His	Gly	Glu	Thr	Lys	Met	Val	Gln	Ala	Ala	115	120	125	
Leu	Thr	Pro	Asp	Ser	Cys	Tyr	Pro	Asp	130	135									

<210> 4  
<211> 136  
<212> Protein  
<213> Bovine

<220>  
<221> misc-feature  
<222> Synthetic polypeptide J chain

<400> 4

Glu	Asp	Glu	Ser	Thr	Val	Leu	Val	Asp	Asn	Lys	Cys	Gln	Cys	Val	Arg
1				5				10						15	
Ile	Thr	Ser	Arg	Ile	Ile	Arg	Asp	Pro	Asp	Asn	Pro	Ser	Glu	Asp	Ile
			20				25						30		
Val	Glu	Arg	Asn	Ile	Arg	Ile	Ile	Val	Pro	Leu	Asn	Thr	Arg	Glu	Asn
		35				40						45			
Ile	Ser	Asp	Pro	Thr	Ser	Pro	Leu	Arg	Thr	Glu	Pro	Lys	Tyr	Asn	Leu
	50					55					60				
Ala	Asn	Leu	Cys	Lys	Lys	Cys	Asp	Pro	Thr	Glu	Ile	Glu	Leu	Asp	Asn
65				70						75					80
Gln	Val	Phe	Thr	Ala	Ser	Gln	Ser	Asn	Ile	Cys	Pro	Asp	Asp	Asp	Tyr
				85					90					95	
Ser	Glu	Thr	Cys	Tyr	Thr	Tyr	Asp	Arg	Asn	Lys	Cys	Tyr	Thr	Thr	Leu
			100					105						110	
Val	Pro	Ile	Thr	His	Arg	Gly	Val	Thr	Arg	Met	Val	Lys	Ala	Thr	Leu
		115					120					125			
Thr	Pro	Asp	Ser	Cys	Tyr	Pro	Asp								
		130					135								

<210> 5  
 <211> 119  
 <212> Protein  
 <213> Bull frog

<220>  
 <221> misc-feature  
 <222> Synthetic polypeptide J chain

<400> 5  
 Glu Gln Glu Tyr Ile Leu Ala Asn Asn Lys Cys Lys Cys Val Lys Ile  
 1 5 10 15  
 Ser Ser Arg Phe Val Pro Ser Thr Glu Arg Pro Gly Glu Glu Ile Leu  
 20 25 30  
 Glu Arg Asn Ile Gln Ile Thr Ile Pro Thr Ser Ser Arg Met Xaa Ile  
 35 40 45  
 Ser Asp Pro Tyr Ser Pro Leu Arg Thr Gln Pro Val Tyr Asn Leu Trp  
 50 55 60  
 Asp Ile Cys Gln Lys Cys Asp Pro Val Gln Leu Glu Ile Gly Gly Ile  
 65 70 75 80  
 Pro Val Leu Ala Ser Gln Pro Xaa Xaa Ser Xaa Pro Asp Asp Glu Cys  
 85 90 95  
 Tyr Thr Thr Glu Val Asn Phe Lys Lys Lys Val Pro Leu Thr Pro Asp  
 100 105 110  
 Ser Cys Tyr Glu Tyr Ser Glu  
 115

<210> 6  
 <211> 129  
 <212> Protein  
 <213> Earthworm

<220>  
 <221> misc-feature  
 <222> Synthetic polypeptide J chain

<400> 6  
 Asn Lys Cys Met Cys Thr Arg Val Thr Ala Arg Ile Arg Gly Thr Arg  
 1 5 10 15  
 Glu Asp Pro Asn Glu Asp Ile Val Glu Arg Tyr Ile Arg Ile Asn Val  
 20 25 30  
 Pro Leu Lys Asn Arg Gly Asn Ile Ser Asp Pro Thr Ser Pro Leu Arg  
 35 40 45

Asn Gln Pro Val Tyr His Leu Ser Pro Ser Cys Lys Lys Cys Asp Pro  
50 55 60

Tyr Glu Asp Gly Val Val Thr Ala Thr Glu Thr Asn Ile Cys Tyr Pro  
65 70 75 80

Asp Gln Gly Val Pro Gln Ser Cys Arg Asp Tyr Cys Pro Glu Leu Asp  
85 90 95

Arg Asn Lys Cys Tyr Thr Val Leu Val Pro Pro Gly Tyr Thr Gly Glu  
100 105 110

Thr Lys Met Val Gln Asn Ala Leu Thr Pro Asp Ala Cys Tyr Pro Asp  
115 120 125

<210> 7

<211> 421

<212> DNA

<213> Artificial Sequence

<220>

<221> CDS

<222> (1)..(414)

<220>

<221> misc-feature

<222> Description of Artificial Sequence: Synthetic polypeptide including target of "full length" TM cDNA

<400> 7

GAT CAG GAA GAT GAA CGT ATT GTT CTG GTT GAC AAC AAG TGC AAG TGT 48  
Asp Gln Glu Asp Glu Arg Ile Val Leu Val Asp Asn Lys Cys Lys Cys  
1 5 10 15

GCT CGT ATT ACT TCT AGA ATC ATC CGT AGC TCA GAG GAC CCA AAT GAA 96  
Ala Arg Ile Thr Ser Arg Ile Ile Arg Ser Ser Glu Asp Pro Asn Glu  
20 25 30

GAT ATA GTC GAA CGT AAC ATC CGT ATC ATC GTC CCA CTG AAT AAC CGG 144  
Asp Ile Val Glu Arg Asn Ile Arg Ile Ile Val Pro Leu Asn Asn Arg  
35 40 45

GAG AAT ATC TCA GAT CCT ACA AGT CCG TTG CGC ACA CGC TTC GTA TAC 192  
Glu Asn Ile Ser Asp Pro Thr Ser Pro Leu Arg Thr Arg Phe Val Tyr  
50 55 60

CAC CTG TCA GAT CTG TGT AAG AAG TGT GAT CCA ACA GAG GTA GAG CTG 240  
His Leu Ser Asp Leu Cys Lys Lys Cys Asp Pro Thr Glu Val Glu Leu  
65 70 75 80

GAC AAT CAG ATA GTC ACT GCG ACT CAA AGC AAC ATT TGC GAT GAG GAC 288  
 Asp Asn Gln Ile Val Thr Ala Thr Gln Ser Asn Ile Cys Asp Glu Asp  
                   85                  90                  95

AGC GCT ACA GAA ACC TGC AGC ACC TAC GAT AGG AAC AAA TGC TAC ACG 336  
 Ser Ala Thr Glu Thr Cys Ser Thr Tyr Asp Arg Asn Lys Cys Tyr Thr  
                   100                  105                  110

GCC GTG GTT CCG CTC GTG TAT GGT GGA GAG ACA AAA ATG GTG GAA ACT 384  
 Ala Val Val Pro Leu Val Tyr Gly Gly Glu Thr Lys Met Val Glu Thr  
                   115                  120                  125

GCC CTT ACG CCC GAT GCA TGC TAT CCG GAC TGAATTC 421  
 Ala Leu Thr Pro Asp Ala Cys Tyr Pro Asp  
                   130                  135

<210> 8  
 <211> 215  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <221> CDS  
 <222> (1)..(213)  
 <220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Nucleotide sequence of Core TM  
 cDNA

<400> 8  
 GAT CAG AAG TGC AAG TGT GCT CGT ATT ACT TCT AGA ATC ATC CGT AGC 48  
 Asp Gln Lys Cys Lys Cys Ala Arg Ile Thr Ser Arg Ile Ile Arg Ser  
           1                  5                  10                  15

TCA GAG GAC CCA AAT GAA GAT ATA GTC GAA CGT AAC ATC CGT ATC ATC 96  
 Ser Glu Asp Pro Asn Glu Asp Ile Val Glu Arg Asn Ile Arg Ile Ile  
                   20                  25                  30

GTC CCA CTG AAT AAC CGG GAG AAT ATC TCA GAT CCT ACA AGT CCG TTG 144  
 Val Pro Leu Asn Asn Arg Glu Asn Ile Ser Asp Pro Thr Ser Pro Leu  
                   35                  40                  45

CGC ACA CGC TTC GTA TAC CAC CTG TCA GAT CTG TGT AAG AAG GAT GAG 192  
 Arg Thr Arg Phe Val Tyr His Leu Ser Asp Leu Cys Lys Lys Asp Glu  
                   50                  55                  60

GAC AGC GCT ACA GAA ACC TGC TG 215  
 Asp Ser Ala Thr Glu Thr Cys  
           65                  70

<210> 9  
 <211> 140  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Nucleotide sequence of C2 fragment

<400> 9  
 CTAGAATCAT CCGTAGCTCA GAGGACCCAA ATGAAGATAT AGTCGAACGT AACATCCGTA 60  
 TCATCGTCCC ACTGAATAAC CGGGAGAATA TCTCAGATCC TACAAGTCCG TTGCGCACAC 120  
 GCTTCGTATA CCACCTGTCA 140

<210> 10  
 <211> 31  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Nucleotide sequence of D1.1 fragment

<400> 10  
 GATCAGAAGT GCAAGTGTGC TCGTATTACT T 31

<210> 11  
 <211> 44  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <221> CDS  
 <222> (1)..(42)

<220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Nucleotide sequence of L3D fragment

<400> 11  
 GAT CTG TGT AAG AAG GAT GAA GAT TCC GCT ACA GAA ACC TGC 42  
 Asp Leu Cys Lys Lys Asp Glu Asp Ser Ala Thr Glu Thr Cys  
 75 80 85

TG 44



<210> 12  
 <211> 109  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Nucleotide sequence of T4 fragment

<400> 12  
 GCACCTACGA TAGGAACAAA TGCTACACGG CCGTGGTTCC GCTCGTGTAT GGTGGAGAGA 60  
 CAAAAATGGT GGAAACTGCC CTTACGCCCG ATGCATGCTA CCCTGACTG 109

<210> 13  
 <211> 286  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <221> CDS  
 <222> (1)..(282)

<220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Nucleotide sequence of Core TM cDNA using L3

<400> 13  
 GAC AAC AAG TGC AAG TGT GCT CGT ATT ACT TCT AGA ATC ATC CGT AGC 48  
 Asp Asn Lys Cys Lys Cys Ala Arg Ile Thr Ser Arg Ile Ile Arg Ser  
 15 20 25 30  
  
 TCA GAG GAC CCA AAT GAA GAT ATA GTC GAA CGT AAC ATC CGT ATC ATC 96  
 Ser Glu Asp Pro Asn Glu Asp Ile Val Glu Arg Asn Ile Arg Ile Ile  
 35 40 45  
  
 GTC CCA CTG AAT AAC CGG GAG AAT ATC TCA GAT CCT ACA AGT CCG TTG 144  
 Val Pro Leu Asn Asn Arg Glu Asn Ile Ser Asp Pro Thr Ser Pro Leu  
 50 55 60  
  
 CGC ACA CGC TTC GTA TAC CAC CTG TCA GAT CTG TGT AAG AAG TGT GAT 192  
 Arg Thr Arg Phe Val Tyr His Leu Ser Asp Leu Cys Lys Lys Cys Asp  
 65 70 75  
  
 CCA ACA GAG GTA GAG CTG GAC AAT CAG ATA GTC ACT GCG ACT CAA AGC 240  
 Pro Thr Glu Val Glu Leu Asp Asn Gln Ile Val Thr Ala Thr Gln Ser  
 80 85 90

AAC ATT TGC GAT GAG GAC AGC GCT ACA GAA ACC TGC TAC TGA 282  
 Asn Ile Cys Asp Glu Asp Ser Ala Thr Glu Thr Cys Tyr \*  
 95 100 105

ATTC 286

<210> 14  
 <211> 105  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <221> CDS  
 <222> (1)..(105)

<220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Nucleotide sequence of L3 fragment

<400> 14  
 GAT CTG TGT AAG AAG TGT GAT CCA ACA GAG GTA GAG CTG GAC AAT CAG 48  
 Asp Leu Cys Lys Lys Cys Asp Pro Thr Glu Val Glu Leu Asp Asn Gln  
 95 100 105 110

ATA GTC ACT GCG ACT CAA AGC AAC ATT TGC GAT GAG GAC AGC GCT ACA 96  
 Ile Val Thr Ala Thr Gln Ser Asn Ile Cys Asp Glu Asp Ser Ala Thr  
 115 120 125

CTT TGG ACG 105  
 Leu Trp Thr

<210> 15  
 <211> 61  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Nucleotide sequence of D1 fragment

<400> 15  
 GATCAGGAAG ATGAACGTAT TGTTCTGGTT GACAACAAGT GCAAGTGTGC TCGTATTACT 60

T 61

<210> 16  
 <211> 61  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Nucleotide sequence of TpS2

<400> 16  
 GCGATGACGA CGATAAGGCC CAAACGGAGA CCTGTACTGT TCGCCTCGT GAACGGCAAA 60  
 ACTGCGGATT CCCGGAAGTA ACACCCTCTC AGTGCCTAA TAAAGGCTGC TGTTTTGATG 120  
 ACACGGTACG GGGCGTTCG TGGTGCTTCT ACCCAATAC AATTGACGTT CCGCCTGAAG 180  
 AAGAGTGCGA GCCGTAAG 198

<210> 17  
 <211> 138  
 <212> Protein  
 <213> Artificial Sequence

<220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Synthetic polypeptide of "full length" TM cDNA

<400> 17  
 Asp Gln Glu Asp Glu Arg Ile Val Leu Val Asp Asn Lys Cys Lys Cys  
 1 5 10 15  
 Ala Arg Ile Thr Ser Arg Ile Ile Arg Ser Ser Glu Asp Pro Asn Glu  
 20 25 30  
 Asp Ile Val Glu Arg Asn Ile Arg Ile Ile Val Pro Leu Asn Asn Arg  
 35 40 45  
 Glu Asn Ile Ser Asp Pro Thr Ser Pro Leu Arg Thr Arg Phe Val Tyr  
 50 55 60  
 His Leu Ser Asp Leu Cys Lys Lys Cys Asp Pro Thr Glu Val Glu Leu  
 65 70 75 80  
 Asp Asn Gln Ile Val Thr Ala Thr Gln Ser Asn Ile Cys Asp Glu Asp  
 85 90 95  
 Ser Ala Thr Glu Thr Cys Ser Thr Tyr Asp Arg Asn Lys Cys Tyr Thr  
 100 105 110  
 Ala Val Val Pro Leu Val Tyr Gly Gly Glu Thr Lys Met Val Glu Thr  
 115 120 125

Ala Leu Thr Pro Asp Ala Cys Tyr Pro Asp  
130 135

<210> 18  
<211> 71  
<212> Protein  
<213> Artificial Sequence

<220>  
<221> misc-feature  
<222> Description of Artificial Sequence: Synthetic polypeptide of Core TM  
cDNA

<400> 18  
Asp Gln Lys Cys Lys Cys Ala Arg Ile Thr Ser Arg Ile Ile Arg Ser  
1 5 10 15

Ser Glu Asp Pro Asn Glu Asp Ile Val Glu Arg Asn Ile Arg Ile Ile  
20 25 30

Val Pro Leu Asn Asn Arg Glu Asn Ile Ser Asp Pro Thr Ser Pro Leu  
35 40 45

Arg Thr Arg Phe Val Tyr His Leu Ser Asp Leu Cys Lys Lys Asp Glu  
50 55 60

Asp Ser Ala Thr Glu Thr Cys  
65 70

<210> 19  
<211> 49  
<212> Protein  
<213> Artificial Sequence

<220>  
<221> misc-feature  
<222> Description of Artificial Sequence: Synthetic polypeptide of C2  
fragment

<400> 19  
Ser Arg Ile Ile Arg Ser Ser Glu Asp Pro Asn Glu Asp Ile Val Glu  
1 5 10 15

Arg Asn Ile Arg Ile Ile Val Pro Leu Asn Asn Arg Glu Asn Ile Ser  
20 25 30

Asp Pro Thr Ser Pro Leu Arg Thr Arg Phe Val Tyr His Leu Ser Asp  
35 40 45

Leu

<210> 20  
 <211> 12  
 <212> Protein  
 <213> Artificial Sequence

<220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Synthetic polypeptide of D 1.1 fragment

<400> 20  
 Asp Gln Lys Cys Lys Cys Ala Arg Ile Thr Ser Arg  
 1 5 10

<210> 21  
 <211> 14  
 <212> Protein  
 <213> Artificial Sequence

<220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Synthetic polypeptide of L3D fragment

<400> 21  
 Asp Leu Cys Lys Lys Asp Glu Asp Ser Ala Thr Glu Thr Cys  
 1 5 10

<210> 22  
 <211> 36  
 <212> Protein  
 <213> Artificial Sequence

<220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Synthetic polypeptide of T4 fragment

<400> 22  
 Ser Thr Tyr Asp Arg Asn Lys Cys Tyr Thr Ala Val Val Pro Leu Val  
 1 5 10 15  
 Tyr Gly Gly Glu Thr Lys Met Val Glu Thr Ala Leu Thr Pro Asp Ala  
 20 25 30  
 Cys Tyr Pro Asp  
 35

<210> 23  
<211> 93  
<212> Protein  
<213> Artificial Sequence

<220>

<221> misc-feature

<222> Description of Artificial Sequence: Synthetic polypeptide of Core TM  
cDNA using L3

<400> 23

Asp Asn Lys Cys Lys Cys Ala Arg Ile Thr Ser Arg Ile Ile Arg Ser  
1 5 10 15

Ser Glu Asp Pro Asn Glu Asp Ile Val Glu Arg Asn Ile Arg Ile Ile  
20 25 30

Val Pro Leu Asn Asn Arg Glu Asn Ile Ser Asp Pro Thr Ser Pro Leu  
35 40 45

Arg Thr Arg Phe Val Tyr His Leu Ser Asp Leu Cys Lys Lys Cys Asp  
50 55 60

Pro Thr Glu Val Glu Leu Asp Asn Gln Ile Val Thr Ala Thr Gln Ser  
65 70 75 80

Asn Ile Cys Asp Glu Asp Ser Ala Thr Glu Thr Cys Tyr  
85 90

<210> 24

<211> 35

<212> Protein

<213> Artificial Sequence

<220>

<221> misc-feature

<222> Description of Artificial Sequence: Synthetic polypeptide of L3  
fragment

<400> 24

Asp Leu Cys Lys Lys Cys Asp Pro Thr Glu Val Glu Leu Asp Asn Gln  
1 5 10 15

Ile Val Thr Ala Thr Gln Ser Asn Ile Cys Asp Glu Asp Ser Ala Thr  
20 25 30

Leu Trp Thr  
35

<210> 25  
 <211> 22  
 <212> Protein  
 <213> Artificial Sequence

<220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Synthetic polypeptide of D1 fragment

<400> 25  
 Asp Gln Glu Asp Glu Arg Ile Val Leu Val Asp Asn Lys Cys Lys Cys  
 1 5 10 15  
 Ala Arg Ile Thr Ser Arg  
 20

<210> 26  
 <211> 66  
 <212> Protein  
 <213> Artificial Sequence

<220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Synthetic polypeptide of Tps2

<400> 26  
 Cys Ser Asp Asp Asp Asp Lys Ala Gln Thr Glu Thr Cys Thr Val Ala  
 1 5 10 15  
 Pro Arg Glu Arg Gln Asn Cys Gly Phe Pro Gly Val Thr Pro Ser Gln  
 20 25 30  
 Cys Ala Asn Lys Gly Cys Cys Phe Asp Asp Thr Val Arg Gly Val Pro  
 35 40 45  
 Trp Cys Phe Tyr Pro Asn Thr Ile Asp Val Pro Pro Glu Glu Glu Cys  
 50 55 60

<210> 27  
 <211> 421  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Complementary nucleotide sequence of "full length" TM cDNA

<400> 27  
 CTAGTCCTTC TACTTGCATA ACAAGACCAA CTGTTGTTCA CGTTCACACG AGCATAATGA 60

AGATCTTAGT AGGCATCGAG TCTCCTGGGT TTACTTCTAT ATCAGCTTGC ATTGTAGGCA 120  
 TAGTAGCAGG GTGACTTATT GGCCCTCTTA TAGAGTCTAG GATGTTTCAGG CAACGCGTGT 180  
 GCGAAGCATA TGGTGGACAG TCTAGACACA TTCTTCACAC TAGGTTGTCT CCATCTCGAC 240  
 CTGTTAGTCT ATCAGTGACG CTGAGTTTCG TTGTAAACGC TACTCCTGTC GCGATGTCTT 300  
 TGGACGTCGT GGATGCTATC CTTGTTTACG ATGTGCCGGC ACCAAGGCGA GCACATACCA 360  
 CCTCTCTGTT TTTACCACCT TTGACGGGAA TCGGGGCTAC GTACGATAGG CCTGACTTAA 420  
 G 421

<210> 28  
 <211> 219  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Complementary nucleotide sequence  
 of Core TM cDNA

<400> 28  
 CTAGTCTTCA CGTTCACAG AGCATAATGA AGATCTTAGT AGGCATCGAG TCTCCTGGGT 60  
 TTACTTCTAT ATCAGCTTGC ATTGTAGGCA TAGTAGCAGG GTGACTTATT GGCCCTCTTA 120  
 TAGAGTCTAG GATGTTTCAGG CAACGCGTGT GCGAAGCATA TGGTGGACAG TCTAGACACA 180  
 TTCTTCCTAC TCCTGTCGCG ATGTCTTTGG ACGACTTAA 219

<210> 29  
 <211> 140  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Complementary nucleotide sequence  
 of C2 fragment

<400> 29  
 TTAGTAGGCA TCGAGTCTCC TGGGTTTACT TCTATATCAG CTTGCATTGT AGGCATAGTA 60  
 GCAGGGTGAC TTATTGGCCC TCTTATAGAG TCTAGGATGT TCAGGCAACG CGTGTGCGAA 120  
 GCATATGGTG GACAGTCTAG 140



<210> 30  
 <211> 31  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Complementary nucleotide sequence  
 of D 1.1 fragment  
  
 <400> 30  
 TCTTCACGTT CACACGAGCA TAATGAAGAT C 31  
  
 <210> 31  
 <211> 44  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <221> misc-feature  
 <222> Complementary nucleotide sequence of L3D fragment  
  
 <400> 31  
 ACACATTCTT CCTACTTCTC AGGCGATGTC TTTGGACGAC TTAA 44  
  
 <210> 32  
 <211> 117  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Complementary nucleotide sequence  
 of T4 fragment  
  
 <400> 32  
 ACGTCGTGGA TGCTATCCTT GTTTACGATG TGCCGGCACC AAGGCGAGCA CATACCACCT 60  
 CTCTGTTTTT ACCACCTTTG ACGGGAATGC GGGCTACGTA CGATGGGACT GACTTAA 117

<210> 33  
<211> 282  
<212> DNA  
<213> Artificial Sequence

<220>  
<221> misc-feature  
<222> Description of Artificial Sequence: Complementary nucleotide sequence  
of Core TM cDNA using L3

<400> 33  
CTGTTGTTCA CGTTCACACG AGCATAATGA AGATCTTAGT AGGCATCGAG TCTCCTGGGT 60  
TTACTTCTAT ATCAGCTTGC ATTGTAGGCA TAGTAGCAGG GTGACTTATT GGCCCTCTTA 120  
TAGAGTCTAG GATGTTTCAGG CAACGCGTGT GCGAAGCATA TGGTGGACAG TCTAGACACA 180  
TTCTTCACAC TAGGTTGTCT CCATCTCGAC CTGTTAGTCT ATCAGTGACG CTGAGTTTCG 240  
TTGTAAACGC TACTCCTGTC GCGATGTCTT TGGACGATGA CT 282

<210> 34  
<211> 105  
<212> DNA  
<213> Artificial Sequence

<220>  
<221> misc-feature  
<222> Description of Artificial Sequence: Complementary nucleotide sequence  
of L3 fragment

<400> 34  
GATCTGTGTA AGAAGTGTGA TCCAACAGAG GTAGAGCTGG ACAATCAGAT AGTCACTGCG 60  
ACTCAAAGCA ACATTTGCGA TGAGGACAGC GCTACACTTT GGACG 105

<210> 35  
<211> 65  
<212> DNA  
<213> Artificial Sequence

<220>  
<221> misc-feature  
<222> Description of Artificial Sequence: Complementary nucleotide sequence  
of D1 fragment

<400> 35  
CTAGTCCTTC TACTTGCATA ACAAGACCAA CTGTTGTTCA CGTTCACACG AGCATAATGA 60  
AGATC 65

<210> 36  
 <211> 206  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Complementary nucleotide sequence  
 of TpS2

<400> 36  
 ACTTCGCTAC TGCTGCTATT CCGGGTTTGC CTCTGGACAT GACAACGCGG AGCACTTGCC 60  
  
 GTTTTGACGC CTAAGGGCCT TCATTGTGGG AGAGTCACGC GATTATTTCC GACGACAAAA 120  
  
 CTACTGTGCC ATGCCCCGCA AGGCACCACG AAGATGGGGT TATGTTAACT GCAAGGCGGA 180  
  
 CTTCTTCTCA CGCTCGGCAT TCTTAA 206

<210> 37  
 <211> 13  
 <212> Protein  
 <213> Artificial Sequence  
  
 <220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Domain 1, 13 amino peptide with  
 substantial  $\beta$ -sheet character

<400> 37  
 Asp Gln Glu Asp Glu Arg Ile Val Leu Val Asp Asn Lys  
 1 5 10

<210> 38  
 <211> 7  
 <212> Protein  
 <213> Tobacco etch virus

<220>  
 <221> misc-feature  
 <222> Peptide recognized by the tobacco etch virus protease Nia

<400> 38  
 Glu Asn Leu Tyr Phe Gln Ser  
 1 5

<210> 39  
<211> 11  
<212> Protein  
<213> Artificial Sequence

<220>  
<221> misc-feature  
<222> Description of Artificial Sequence: Synthetic polypeptide residues  
from pro-cathepsin E

<400> 39  
Lys Ala His Lys Val Asp Met Val Gln Tyr Thr  
1 5 10

<210> 40  
<211> 4  
<212> Protein  
<213> Artificial Sequence

<220>  
<221> misc-feature  
<222> Description of Artificial Sequence: Linker from procathepsin

<400> 40  
Val Gln Tyr Thr  
1

<210> 41  
<211> 6  
<212> Protein  
<213> Human

<220>  
<221> misc-feature  
<222> Linker from polyimmunoglobulin receptor

<400> 41  
Glu Lys Ala Val Ala Asp  
1 5

<210> 42  
 <211> 131  
 <212> DNa  
 <213> Artificial Sequence  
  
 <220> CDS  
 <221> 1..78  
 <222> Description of Artificial Sequence: Nucleotide sequence of secretion signal from pMelBac

<400> 42  
 ATG AAA TTC TTA GTC AAC GTT GCC CTT TTT ATG GTC GTA TAC ATT TCT 48  
 Met Lys Phe Leu Val Asn Val Ala Leu Phe Met Val Val Tyr Ile Ser  
                     40                    45                    50  
  
 TAC ATC TAT GCG GAT CCG AGC TCG AGT GCT CTAGATCTGC AGCTGGTACC 98  
 Tyr Ile Tyr Ala Asp Pro Ser Ser Ser Ala  
                     55                    60  
  
 ATGGAATTCG AAGCTTGGAG TCGACTCTGC TGA 131

<210> 43  
 <211> 26  
 <212> Protein  
 <213> Artificial Sequence  
  
 <220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Synthetic polypeptide sequence of secretion signal from pMelBac

<400> 43  
 Met Lys Phe Leu Val Asn Val Ala Leu Phe Met Val Val Tyr Ile Ser  
   1                    5                    10                    15  
  
 Tyr Ile Tyr Ala Asp Pro Ser Ser Ser Ala  
                     20                    25

<210> 44  
 <211> 4  
 <212> Protein  
 <213> Artificial Sequence  
  
 <220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Endomembrane retention signal  
  
 <400> 44  
   Lys Asp Glu Leu  
   1

<210> 45  
 <211> 16  
 <212> Protein  
 <213> Human  
  
 <220>  
 <221> misc-feature  
 <222> Residues 585-600 of polyimmunoglobulin receptor  
  
 <400> 45  
 Ala Ile Gln Asp Pro Arg Leu Phe Ala Glu Glu Lys Ala Val Ala Asp  
 1 5 10 15

<210> 46  
 <211> 61  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Oligonucleotide 1  
  
 <400> 46  
 GATCAGGAAG ATGAACGTAT TGTTCTGGTT GACAACAAGT GCAAGTGTGC TCGTATTACT 60  
 T 61

<210> 47  
 <211> 61  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Oligonucleotide 2  
  
 <400> 47  
 CTAGAAGTAA TACGAGCACA CTTGCACTTG TTGTCAACCA GAACAATACG TTCATCTTCC 60  
 T 61

<210> 48  
 <211> 31  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Oligonucleotide 1.1  
  
 <400> 48  
 GATCAGAAGT GCAAGTGTGC TCGTATTACT T 31

<210> 49  
<211> 6  
<212> DNA  
<213> Artificial Sequence

<220>  
<221> misc-feature  
<222> Description of Artificial Sequence: Oligonucleotide 1.2

<400> 49  
CTAGAAGTAA TACGAGCACA CTTGCACTTC T

31

<210> 50  
<211> 61  
<212> DNA  
<213> Artificial Sequence

<220>  
<221> misc-feature  
<222> Description of Artificial Sequence: Oligonucleotide 1.2ser

<400> 50  
GATCAGGAAG ATGAACGTAT TGTCTGGTT GACAACAAGT GCAAGTCCGC TCGTATTACT

60

T

61

<210> 51  
<211> 61  
<212> DNA  
<213> Artificial Sequence

<220>  
<221> misc-feature  
<222> Description of Artificial Sequence: Oligonucleotide 2.2ser

<400> 51  
CTAGAAGTAA TACGAGCGGA CTTGCACTTG TTGTCAACCA GAACAATACG TTCATCTTCC

60

T

61

<210> 52  
 <211> 61  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Oligonucleotide 1.2val  
  
 <400> 52  
 GATCAGGAAG ATGAACGTAT TGTTCCTGGTT GACAACAAGT GCAAGGTTGC TCGTATTACT 60  
 T 61  
  
 <210> 53  
 <211> 61  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Oligonucleotide 2.2val  
  
 <400> 53  
 CTAGAAGTAA TACGAGCAAC CTTGCACTTG TTGTCAACCA GAACAATACG TTCATCTTCC 60  
 T 61  
  
 <210> 54  
 <211> 61  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Oligonucleotide 3  
  
 <400> 54  
 CTAGAATCAT CCGTAGCTCA GAGGACCCAA ATGAAGATAT AGTCGAA 47  
  
 <210> 55  
 <211> 58  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Oligonucleotide 4  
  
 <400> 55  
 GATACGGATG TTACGTTCTGA CTATATCTTC ATTTGGGTCC TCTGAGCTAC GGATGATT 58



<210> 56  
 <211> 49  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Oligonucleotide 5  
  
 <400> 56  
 CGTAACATCC GTATCATCGT CCCACTGAAT AACCGGGAGA ATATCTCAG 49  
  
 <210> 57  
 <211> 49  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Oligonucleotide 5.1dg  
  
 <400> 57  
 CGTAACATCC GTATCATCGT CCCACTGAAT AACCGGGAGC ACATCTCAG 49  
  
 <210> 58  
 <211> 49  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Oligonucleotide 6  
  
 <400> 58  
 ACGGACTTGT AGGATCTGAG ATATTCTCCC GGTATTTCAG TGGGACGAT 49  
  
 <210> 59  
 <211> 49  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Oligonucleotide 6.1dg  
  
 <400> 59  
 ACGGACTTGT AGGATCTGAG ATGTGCTCCC GGTATTTCAG TGGGACGAT 49

<210> 60  
<211> 44  
<212> DNA  
<213> Artificial Sequence

<220>  
<221> misc-feature  
<222> Description of Artificial Sequence: Oligonucleotide 7

<400> 60  
ATCCTACAAG TCCGTTGCGC ACACGCTTCG TATACCACCT GTCA

44

<210> 61  
<211> 33  
<212> DNA  
<213> Artificial Sequence

<220>  
<221> misc-feature  
<222> Description of Artificial Sequence: Oligonucleotide 8

<400> 61  
GATCTGACAG GTGGTATACG AAGCGTGTGC GCA

33

<210> 62  
<211> 60  
<212> DNA  
<213> Artificial Sequence

<220>  
<221> misc-feature  
<222> Description of Artificial Sequence: Oligonucleotide 9

<400> 62  
GATCTGTGTA AGAAGTGTGA TCCAACAGAG GTAGAGCTGG ACAATCAGAT AGTCACTGCA

60

<210> 63  
<211> 44  
<212> DNA  
<213> Artificial Sequence

<220>  
<221> misc-feature  
<222> Description of Artificial Sequence: Oligonucleotide 9L3Δ

<400> 63  
GATCTGTGTA AGAAGGATGA GGACAGCGCT ACAGAAACCT GCTG

44

<210> 64  
 <211> 44  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Oligonucleotide 10L3Δ  
  
 <400> 64  
 AATTCAGCAG GTTTCTGTAG CGCTGTCCTC ATCCTTCTTA CACA 44  
  
  
 <210> 65  
 <211> 62  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Oligonucleotide 9L3ΔKDEL  
  
 <400> 65  
 GATCTGTGTA AGAAGGATGA GGACAGCGCT ACAGAAACCT GCTACGAGAA GGATGAGCTG 60  
 TG 62  
  
 <210> 66  
 <211> 62  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Oligonucleotide 10L3ΔKDEL  
  
 <400> 66  
 AATTCACAGC TCATCCTTCG CGTCGCAGGT TTCTGTAGCG CTGTCCTCAT CCTTCTTACA 60  
 CA 62  
  
 <210> 67  
 <211> 59  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Oligonucleotide 9.2Δ3  
  
 <400> 67  
 GATCTGTGTA AGAAGTCTGA TATCGATGAA GATTCCGCTA CAGAAACCTG CAGCACATG 59

<210> 68  
<211> 59  
<212> DNA  
<213> Artificial Sequence

<220>  
<221> misc-feature  
<222> Description of Artificial Sequence: Oligonucleotide 10.2Δ3

<400> 68  
AATTCATGTG CTGCAGGTTT CTGTAGCGGA ATCTTCATCG ATATCAGACT TCTTACACA 59

<210> 69  
<211> 64  
<212> DNA  
<213> Artificial Sequence

<220>  
<221> misc-feature  
<222> Description of Artificial Sequence: Oligonucleotide 9.3Δ3/ser68

<400> 69  
GATCTGTCTA AGAAGTCTGA TATCGATGAA GATTACAGAT TCTTCAGACT ATAGCTACTT 60  
CTAA 64

<210> 70  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<221> misc-feature  
<222> Description of Artificial Sequence: Oligonucleotide 10.3Δ3/ser68

<400> 70  
AATCTTCATC GATATCAGAC TTCTTAGACA 30

<210> 71  
 <211> 64  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Oligonucleotide 9.3Δ3/val68  
  
 <400> 71  
 GATCTGGTTA AGAAGTCTGA TATCGATGAA GATTACCAAT TCTTCAGACT ATAGCTACTT 60  
 CTAA 64  
  
 <210> 72  
 <211> 30  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Oligonucleotide 10.3Δ3/val68  
  
 <400> 72  
 AATCTTCATC GATATCAGAC TTCTTAACCA 30  
  
 <210> 73  
 <211> 41  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Oligonucleotide 10  
  
 <400> 73  
 ATTGTCCAGC TCTACCTCTG TTGGATCACA CTTCTTACAC A 41  
  
 <210> 74  
 <211> 46  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Oligonucleotide 11  
  
 <400> 74  
 ACTCAAAGCA ACATTTGCGA TGAGGACAGC GCTACAGAAA CCTGCA 46

<210> 75  
 <211> 57  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Oligonucleotide 12  
  
 <400> 75  
 GGTTCCTGTA GCGCTCTGCT CATCGCAAAT GTTGCTTTGA GTCGCAGTGA CTATCTG 57  
  
 <210> 76  
 <211> 59  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Oligonucleotide 13  
  
 <400> 76  
 GCACCTACGA TAGGAACAAA TGCTACACGG CCGTGGTTC GTCGTGTAT GGTGGAGAG 59  
  
 <210> 77  
 <211> 48  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Oligonucleotide 14  
  
 <400> 77  
 GAGCGGAACC ACGGCCGTGT AGCATTTGTT CCTATCGTAG GTGCTGCA 48  
  
 <210> 78  
 <211> 50  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Oligonucleotide 15  
  
 <400> 78  
 ACAAAAATGG TGGAACTGC CCTACGCCC GATGCATGCT ATCCGGACTG 50

<210> 79  
 <211> 69  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Oligonucleotide 16  
  
 <400> 79  
 AATTCAGTCC GGATAGCATG CATCGGGCGT AAGGGCAGTT TCCACCATT TGTCTCTCC 60  
 ACCATACAC 69  
  
 <210> 80  
 <211> 62  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Oligonucleotide 15KDEL  
  
 <400> 80  
 ACAAAAATGG TGGAACTGC CCTTACGCCC GATGCATGCT ATCCGGACAA GGATGAATTG 60  
 TG 62  
  
 <210> 81  
 <211> 81  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Oligonucleotide 16KDEL  
  
 <400> 81  
 AATTCACAAT TCATCCTTGT CCGGATAGCA TGCATCGGGC GTAAGGGCAG TTTCCACCAT 60  
 TTTTGTCTCT CCACCATACA C 81

<210> 82  
 <211> 88  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Oligonucleotide P1  
  
 <400> 82  
 GATCAGGTCG CTGCCATCCA AGACCCGAGG CTGTTCCGCG AAGAGAAGGC CGTCGCTGAC 60  
  
 TCCAAGTGCA AGTGTGCTCG TATTACTT 88  
  
 <210> 83  
 <211> 88  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Oligonucleotide P2  
  
 <400> 83  
 CTAGAAGTAA TACGAGCACA CTTGCACTTG GAGTCAGCGA CGGCCTTCTC TTCGGCGAAC 60  
  
 AGCCTCGGGT CTTGGATGGC AGCGACCT 88  
  
 <210> 84  
 <211> 10  
 <212> Protein  
 <213> Artificial Sequence  
  
 <220>  
 <221> misc-feature  
 <222> Description of Artificial Sequence: Nuclear targeting sequence 1  
  
 <400> 84  
 Cys Ala Ala Pro Lys Lys Lys Arg Lys Val  
 1 5 10



<210> 85  
<211> 22  
<212> Protein  
<213> Artificial Sequence

<220>  
<221> misc-feature  
<222> Description of Artificial Sequence: Nuclear targeting sequence 2

<400> 85  
Cys Ala Ala Lys Arg Pro Pro Ala Ala Ile Lys Lys Ala Ala Ala Gly  
1 5 10 15  
Gln Ala Lys Lys Lys Lys  
20

<210> 86  
<211> 4  
<212> Protein  
<213> Artificial Sequence

<220>  
<221> misc-feature  
<222> Description of Artificial Sequence: HDEL linker sequence for  
intracellular targeting

<400> 86  
His Asp Glu Leu  
1

<210> 87  
<211> 77  
<212> DNA  
<213> Artificial Sequence

<220>  
<221> misc-feature  
<222> Description of Artificial Sequence: Oligonucleotide Tpl

<400> 87  
GCGATGACGA CGATAAGGCC CAAACGGAGA CCTGTACTGT TCGCCTCGT GAACGGCAAA 60  
ACTGCGGATT CCCGGAA 77

<210> 88  
<211> 66  
<212> DNA  
<213> Artificial Sequence

<220>  
<221> misc-feature  
<222> Description of Artificial Sequence: Oligonucleotide Tp2

<400> 88

GTTTTGCCGT TCACGAGGCG CAACAGTACA GGTCTCCGTT TGGGCCTTAT CGTCGTCATC 60

GCTTCA 66

<210> 89  
<211> 72  
<212> DNA  
<213> Artificial Sequence

<220>  
<221> misc-feature  
<222> Description of Artificial Sequence: Oligonucleotide Tp3

<400> 89  
GTAACACCCT CTCAGTGCGC TAATAAAGGC TGCTGTTTTG ATGACACGGT ACGGGGCGTT 60

CCGTGGTGCT TC 72

<210> 90  
<211> 72  
<212> DNA  
<213> Artificial Sequence

<220>  
<221> misc-feature  
<222> Description of Artificial Sequence: Oligonucleotide Tp4

<400> 90  
GCCCCGTACC GTGTCATCAA AACAGCAGCC TTTATTAGCG CACTGAGAGG GTGTTACTTC 60

CGGGAATCCG CA 72

<210> 91  
<211> 49  
<212> DNA  
<213> Artificial Sequence

<220>  
<221> misc-feature  
<222> Description of Artificial Sequence: Oligonucleotide Tp5

<400> 91  
TACCCCAATA CAATTGACGT TCCGCCTGAA GAAGAGTGCG AGCCGTAAG

49

<210> 92  
<211> 68  
<212> DNA  
<213> Artificial Sequence

<220>  
<221> misc-feature  
<222> Description of Artificial Sequence: Oligonucleotide Tp6

<400> 92  
AATTCTTACG GCTCGCACTC TTCTTCAGGC GGCAAGTCAA TTGTATTGGG GTAGAAGCAC

60

CACGGAAC

68

<210> 93  
<211> 13  
<212> Protein  
<213> Artificial Sequence

<220>  
<221> misc-feature  
<222> Description of Artificial Sequence: Synthetic peptide linker

<400> 93  
Val Ala Val Gln Ser Ala Gly Thr Pro Ala Ser Gly Ser  
1 5 10